



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/731,031

12/10/2003

Yuki Sasaki

118048

5154

7590
OLIFF & BERRIDGE
P.O. BOX 19928
ALEXANDRIA, VA 22320

03/08/2007

EXAMINER

ROGERS, JAMES WILLIAM

ART UNIT

PAPER NUMBER

1618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

3 MONTHS

03/08/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/731,031	Applicant(s) SASAKI ET AL.	
	Examiner James W. Rogers, Ph.D.	Art Unit 1618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/15/2006 has been entered.

The amendments to the claims filed 12/15/2006 have been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-16 and 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Sasaki et al. (US 2003/0044370), for the reasons set forth in the office action mailed 04/18/2006.

Regarding the new limitations in newly amended claims 1 and 18-20 in which the particles have undergone a reshaping treatment, this limitation is considered a product by process type of limitation by the examiner. The claimed invention for claims 1-14 and 18-20 are to a resin powder or a cosmetic containing that resin powder and not to the process to manufacture such a powder, therefore the limitation that the particles have undergone a reshaping treatment was given no patentable weight by the examiner. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Regarding rejected claims 15-16, which in the previous office action dated 04/18/2006 were not rejected by Sasaki alone. The rejection was deemed necessary by the examiner because under further review of the Sasaki reference the examiner found that the process to make the particles comprised emulsion polymerization and then further adding a coagulant to agglomerate the resin particles until the intended particle size was formed. Then by heating the particles to the glass transition temperature the agglomerated particles are untied by fusion. See [0054] The process to produce the particles within Sasaki reads

Art Unit: 1618

on the process claims 15 and 16 which require a step of producing the particles by emulsion polymerization and then a reshaping treatment in which the particles are flattened by mixing and stirring the particles and a medium.

Response to Arguments

Applicant's arguments filed 08/18/2006 have been fully considered but they are not persuasive.

Applicant asserts that Sasaki does not teach resin particles or methods of producing resin particles, subjected to a reshaping treatment and that the Sasaki application would not meet the limitation that the particles are satisfactory with the equation in claim 1, $0.5 < b/a < 1$ and $0.4 < c/b < 0.8$.

The relevance of these assertions is unclear. The response to the argument on the reshaping treatment is addressed above. The Sasaki application teaches that particles with an SF1 of less than 110 are spherical with good spreadability but have inefficient affinity to skin, and particles with an SF1 above 140 have unevenness on the surface of the resin, which improves skin adhesion, but spreadability becomes insufficient. See [0027] and [0028]. Thus it is inherent that the patent teaches the same dimensions as those claimed by the applicant since the surface area claimed is the same and the application teaches a non-spherical particle in which the dimensions of a,b,c in applicants application can fall within the range of the claimed SF1 values and volume of the particle in 2003/0044. Furthermore applicants claim an SF1 value of from 110 to 140 which is dependent upon claim 1, therefore it is inherent that any particle

Art Unit: 1618

with an SF1 value of from 110 to 140 would meet the limitation of the equation in claim 1.

Applicants also state that the claimed powders would have not been obvious in view of the teachings of Sasaki because unexpected results are obtained when the claimed resin powder was applied to the skin of twenty panelist.

The relevance of this assertion is unclear. Evidence of secondary considerations, such as unexpected results or commercial success, is irrelevant to 35 U.S.C. 102 rejections and thus cannot overcome a rejection so based. In re Wiggins, 488 F.2d 538, 543, 179 USPQ 421, 425 (CCPA 1973). 2131.05 [R-5] Nonanalogous >or Disparaging Prior< Art See MPEP 2131.04.

The Affidavit under 37 CFR 1.132 filed 12/15/2006 is insufficient to overcome the rejection of claim 1-16 and 18-20 based upon the arguments as set forth above because: The evidence as filed only shows a vary narrow interpretation of the Sasaki reference. Specifically the affidavit only shows one working example from Sasaki with an SFI of 112. The examples within Sasaki were given solely for the purpose of illustration and were not to be construed as being limiting to their invention since many variations are possible without departing from the spirit and scope of the invention. The only evidence shown by the affidavit that is considered persuasive is that a particle with an SF1 of 112 would not satisfy the equation of claim 1 which is to be expected since Sasaki clearly recites that a particle with an SF1 of less than 110 are spherical thus it is not surprising that $b/a=1$ and $c/b=1$ since the dimensions of a sphere would be uniform. However Sasaki clearly teaches that the non-spherical particles can have an SF1

Art Unit: 1618

between 110 and 140, preferably 130 or 120, in which the dimensions of a,b,c in applicants application can fall within the range of the claimed SF1 and volume of the particleS in Sasaki. Therefore Sasaki anticipates the dimensions claimed by applicants.

Claims 1-16 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Sasaki et al. (US 6,893,649), for the reasons set forth in the office action mailed 04/18/2006.

Regarding the new limitations in newly amended claims 1 and 18-20 in which the particles have undergone a reshaping treatment, this limitation is considered a product by process type of limitation by the examiner. The claimed invention for claims 1-14 and 18-20 are to a resin powder or a cosmetic containing that resin powder and not to the process to manufacture such a powder, therefore the limitation that the particles have undergone a reshaping treatment was given no patentable weight by the examiner. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Regarding rejected claims 15-16, which in the previous office action dated 04/18/2006 were not rejected by Sasaki alone. The rejection was deemed necessary by the examiner because under further review of the Sasaki reference the examiner found that the process to make the

Art Unit: 1618

particles comprised emulsion polymerization and then further adding a coagulant to agglomerate the resin particles until the intended particle size was formed. Then by heating the particles to the glass transition temperature the agglomerated particles are untied by fusion. See col 7 lin 32-col 9 lin 28. The process to produce the particles within Sasaki reads on the process claims 15 and 16 which require a step of producing the particles by emulsion polymerization and then a reshaping treatment in which the particles are flattened by mixing and stirring the particles and a medium.

Response to Arguments

Applicant's arguments filed 08/18/2006 have been fully considered but they are not persuasive.

Applicant asserts that Sasaki does not teach resin particles or methods of producing resin particles, subjected to a reshaping treatment and that the Sasaki application would not meet the limitation that the particles are satisfactory with the equation in claim 1, $0.5 < b/a < 1$ and $0.4 < c/b < 0.8$.

The relevance of these assertions is unclear. The response to the argument on the reshaping treatment is addressed above. The Sasaki patent teaches that particles with an SF1 of less than 110 are spherical with good spreadability but inefficient affinity to skin, and particles with an SF1 above 140 have unevenness on the surface of the resin, which improves skin adhesion, but spreadability becomes insufficient. See col 4 lin 65-col 5 lin 13. Thus it is inherent that the patent teaches the same dimensions as those claimed by the applicant since the surface area claimed is the same and the patent teaches a non-spherical particle in which the dimensions of a,b,c in applicants

Art Unit: 1618

application can fall within the range of the claimed SF1 values and volume of the particle in 6,893,649. Furthermore applicants claim an SF1 value of from 110 to 140 which is dependent upon claim 1, therefore it is inherent that any particle with an SF1 value of from 110 to 140 would meet the limitation of the equation in claim 1.

Applicants also state that the claimed powders would have not been obvious in view of the teachings of Sasaki because the claimed resin particle unexpectedly had far superior hiding power to that formed in '649.

The relevance of this assertion is unclear. Evidence of secondary considerations, such as unexpected results or commercial success, is irrelevant to 35 U.S.C. 102 rejections and thus cannot overcome a rejection so based. In re Wiggins, 488 F.2d 538, 543, 179 USPQ 421, 425 (CCPA 1973). 2131.05 [R-5] Nonanalogous >or Disparaging Prior< Art See MPEP 2131.04.

The Affidavit under 37 CFR 1.132 filed 12/15/2006 is insufficient to overcome the rejection of claim 1-16 and 18-20 based upon the arguments as set forth above because: The evidence as filed only shows a vary narrow interpretation of the Sasaki reference. Specifically the affidavit only shows one working example from Sasaki with an SFI of 115. The examples within Sasaki were given solely for the purpose of illustration and were not to be construed as being limiting to their invention since many variations are possible without departing from the spirit and scope of the invention. The only evidence shown by the affidavit that is considered persuasive is that a particle with an SF1 of 115 would not satisfy the equation of claim 1 which is to be expected since Sasaki clearly recites that a particle with an SF1 of less than 110 are spherical thus it is

Art Unit: 1618

not surprising that $b/a=1$ and $c/b=1$ since the dimensions of a sphere would be uniform.

However Sasaki clearly teaches that the non-spherical particles can have an SF1

between 110 and 140, preferably 130 or 120, in which the dimensions of a,b,c in

applicant's application can fall within the range of the claimed SF1 and volume of the

particles in Sasaki. Therefore Sasaki anticipates the dimensions claimed by applicant's.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US 2003/0044370) in view of Sakuma (US 2003/0023021 A1).

Sasaki discloses a resin powder (including co-styrene-acrylate polymer) for dermatological compositions (including antiperspirants) and methods to make the composition (including emulsion polymerization). See [001], [002], [0039], [0052]-[0055]. Regarding claims 1,15, 18-20, the phrase "wherein the particles have a degree of hydrophobicity of from 10% to 60 %" it is obvious that since the particles are composed of the same polymers they will have the same hydrophobicity. Regarding claims 1,5,15,18-20, the equation limitation is met by the Sasaki patent since it is obvious that the dimensions of a, b and c for the particles disclosed in Sasaki are in the range of applicants currently claimed invention since it discloses the same composition and polymer resin (including the same MW) with the same SF1 values, the same particle average volume and the same surfaceness index. See abstr, [0021] lin 1-4, [0025],[0031],[0038]. Besides the above the Sasaki application discloses that particles with an SF1 of less than 110 are spherical with good spreadability but have inefficient affinity to skin, and particles with an SF1 above 140 have unevenness on the surface of the resin, which improves skin adhesion, but spreadability becomes insufficient, therefore it is obvious that someone skilled in the art would experiment with different dimensions of the particle in order to have the best combination of spreadability and affinity to the skin. See [0027] and [0028]. Thus it is obvious that Sasaki discloses the same dimensions as those claimed by the applicant since the surface area claimed is the same and the application teaches a non-spherical particle in which the dimensions of a,b,c in applicants application are within the range of the claimed SF1 values and volume of the particle in the patent. Regarding claims 8-9 Sasaki discloses the Tg

Art Unit: 1618

temperature within the range specified by applicants, See [0040] lin 1-2. Regarding claim 14, Sasaki discloses that fine particles can be adhered to the surface of the particles, See [0056] lin 1-2. Regarding claim 19, Sasaki discloses that the resin powder can take the form of an emulsion. See [0050].

Sasaki does not disclose reshaping the particles by flattening the particles by colliding the particles against a uniform plane under high pressure.

Sakuma discloses resin particles and the process for producing the same. The resin particles were disclosed as useful in many applications including cosmetics. See [0001]. Sakuma discloses that in order to make the particle diameter of the particles a high pressure dispensing machine such as a nanomizer to crash the particles against the vessel wall would be advantageous. See [0073]

It would have been obvious to a person of ordinary skill in the art at the time the claimed invention was made to combine the art described in the documents above because Sasaki discloses all of applicants claimed invention except for the step of subjecting the particles to a reshaping treatment while Sakuma discloses that resin particles reshaped by instruments such as nanomizers was already well known in the art at the time of the invention. The motivation to combine the above documents would be a resin powder shaped by a nanomizer in order to form a desirable particle dimension with an even distribution of the shaped particles that would have improved skin adhesion and spreadability. Thus, the claimed invention, taken as a whole was *prima facie* obvious over the combined teachings of the prior art.

Conclusion

No claims are allowed. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James W. Rogers, Ph.D. whose telephone number is (571) 272-7838. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Hartley can be reached on (571) 272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


MICHAEL G. HARTLEY
SUPERVISORY PATENT EXAMINER